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REMARKS

This is intended as a full and complete response to the First Office Action dated February 13, 2006 (hereinafter "the Office Action") having a shortened statutory period for response set to expire on May 13, 2006.

Claims 1, 6, 8-10, 14-16, and 22-23 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,414,713 ("Waschura"). With this rejection, Applicants respectfully disagree, at least for the reasons set forth below.

Waschura with reference to FIG. 1 thereof discloses a generator board 40 and a detector board 80. The generator board 40 is shown in more detail in FIG. 2 of Waschura, and the detector board 80 is shown in more detail in FIG. 3 of Waschura.

At col. 5, lines 54-57, with reference to FIG. 2 of Waschura, it is stated in relevant part that the generator board 40 includes a pattern generator 44. As indicated at col. 6, line 22-68, with reference to FIG. 2 of Waschura, dedicated logic is used to provide pattern generator 44. Thus, a user selects a pattern causing a control signal to be sent, the control signal causes the pattern generator 44 to create a controlled data stream to provide an n-bit fixed pattern or one of four different types of pseudorandom patterns. *Id.*

At col. 7, lines 63-65, with reference to FIG. 3 of Waschura, it is stated in relevant part that the detector board 80 includes a reference generator 84. As stated at col. 8, lines 34-35, of Waschura, "[t]he reference generator 84 is virtually identical to the pattern generator 44." More particularly, as stated at col. 8, lines 35-38, of Waschura, "...the reference generator 84 includes the same elements for generating either a fixed or pseudo-random pattern as the pattern generator 44." As indicated in Waschura at col. 8, lines 38-48, reference generator 84 is initialized responsive to the control data stream from pattern generator 44.

Accordingly, it should be appreciated that the pattern generator and the reference generator of Waschura use dedicated logic to provide fixed or pseudorandom pattern generation and detection thereof, respectively. In other words, the logic functions are predefined to handle a set of n-bit fixed patterns and a set of pseudo-random patterns. This is a limitation on the variability of Waschura.

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In contrast to Waschura, amended Claims 1, 6, 8, 14, and 23 are not limited by dedicated logic as is Waschura. Rather, for example, amended Claims 1, 6, 8, 14 and 23 each recite in relevant part that logic functions are defined responsive to at least one configuration bitstream. Such logic functions are therefore not predefined as in the dedicated logic of Waschura. Thus, for example, where Waschura is limited to a specific set of four polynomials for pseudo-random pattern generation, programmable logic is not so limited. Moreover, unlike the dedicated logic of Waschura, programmable logic resources may be returned to a pool of available logic resources when not in use for overhead reuse, or they may be reconfigured, in whole or in part, for another test mode or operational mode.

Accordingly, it is respectfully submitted that as Waschura does not show or describe amended Claims 1, 6, 8, 14, and 23, amended Claims 1, 6, 8, 14, and 23 should be allowed. Moreover, it is respectfully submitted that Claims 9-10, 15-16, and 22, which depend upon an allowable base claim, are likewise allowable.

Additionally, it is respectfully submitted that the objection to Claims 2-5, 7, 11-13, 17-21, and 24 as being dependent upon a rejected base claim is overcome as Claims 1, 6, 8, 14, and 23 should be allowed. Accordingly, withdrawal of the objection to Claims 2-5, 7, 11-13, 17-21, and 24 is respectfully requested.

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CONCLUSION

All claims are in condition for allowance and a Notice of Allowance is respectfully requested. If there are any questions, the Applicants' attorney can be reached at Tel: 408-879-6149 (Pacific Standard Time).

Respectfully submitted,

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I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450, on May 10, 2006.

Pat Tompkins

Name

Signature